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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
VOLKER HENNIGE, ET AL. : EXAMINER: RHEE, J. J.
SERIAL NO: 10/524,143 :
FILED: FEBRUARY 11, 2005 : GROUP ART UNIT: 1795
FOR: ELECTRIC SEPARATOR, :
METHOD FOR MAKING SAME AND
USE THEREOF IN HIGH-POWER
LITHIUM CELLS

REPLY BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

The following Reply Brief is in reply to the Examiner's Answer dated September 5, 2008 (Answer).

The statement of the Grounds of Rejection (Answer at 3-8) is identical in the statement in the rejection dated November 16, 2007, which has already been responded to in the Appeal Brief. In addition, in the Response to Argument (Answer at 8-11), much but not all is identical to the Response to Argument in the Final Rejection, which has also already been responded to in the Appeal Brief. The following is in reply to findings made for the first time under Response to Argument.

In response to Applicants' argument that the inorganic fillers optionally contained in the encapsulation sheath of Yen do not make the encapsulation sheath inorganic, the Examiner finds "the inorganic fillers itself is [sic] considered the inorganic coating" (Answer at 8).

In reply, a material containing a polymer and an inorganic material, even if not optional, cannot be characterized as “inorganic.”

The Examiner finds that “Yen discloses that the separator surface pore size is at least 5 microns which reads on a pore radius of 75-100 μ m because at least 5 microns is 5 microns or more” (Answer at 9).

In reply, it is not clear what is meant by “surface” pore size since the separator necessarily has a certain thickness. Nevertheless, this disclosure does not suggest a pore radius distribution in the separator in which at least 50% of the pores have a pore radius from 75 to 150 μ m.

In response to Applicants’ argument with regard to the separate patentability of Claim 9 that Yen does not disclose any porosity for his separator because Yen refers to the wet porosity of the cellophane material disclosed as an exemplary material for the encapsulation sheath therein, the Examiner finds that “the encapsulation sheath is part of the separator just as appellant’s coating is part of appellant’s separator therefore the porosity of the separator is disclosed by Yen” (Answer at 9).

In reply, Claim 9 refers to the porosity of **the** separator, not **part** of the separator.

In response to Applicants’ argument with regard to the separate patentability of Claim 10 that there is no basis for the Examiner’s finding of the presently-recited breaking strength as inherent in Yen, the Examiner finds that “Yen teaches the nonwoven polyolefin separator as desired by the applicant therefore, it is inherent that the separator has a breaking strength of more than 1N/cm because the same materials should have the same physical properties” (Answer at 9).

In reply, Applicants have already shown how the material of the presently-claimed separator is different from that of Yen. Therefore, it cannot be assumed that any of the properties of Yen’s separator are inherent in the presently-claimed separator.

In response to Applicants' argument regarding the separate patentability of Claims 11 and 12 that there is no basis for finding that the presently-recited bendable limitation is inherent in Yen, the Examiner finds that "Yen discloses the [sic] a nonwoven polyolefin separator as desired by the applicant it would be inherent that the separator is bendable around a radius down to 100 mm without damage or around a radius down to 1 mm without damage" (Answer at 9-10).

In reply, what has been stated above with regard to the Examiner's finding on Claim 10 on inherency applies herein as well.

In response to Applicants' argument that the fillers of Kung are not part of a coating but are present in the separator *per se*, the Examiner finds that "the fillers disclosed by Kung is [sic] a coating on and in the separator" (Answer at 10).

In reply, Applicants maintain the argument made in the Appeal Brief.

In response to Applicants' argument regarding the separate patentability of Claim 8 that none of the applied prior art discloses aluminum oxide particles of any average particle size, let alone that recited in the claim, adhered by an oxide of Zr or Si, the Examiner finds that "both Kung and Yen teaches [sic] that aluminum oxide particles and Zr or Si oxide among other inorganic particles can be used as fillers" (Answer at 11).

In reply, the fact that such oxides may be disclosed individually does not suggest any adherence of one type (aluminum oxide) to another type (oxide of Zr or Si).

In response to Applicants' arguments regarding the double patenting rejection, the Examiner simply repeats the Response to Argument in the Final Rejection, except that both mentions of Yen are omitted, and the second mention of Yen is replaced with "copending application." However, the Examiner has not substantively responded to Applicants' arguments in the Appeal Brief.

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Reply Brief

Applicants continue to maintain that the rejection should be REVERSED.

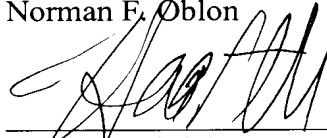
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Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Harris A. Pitlick', is written over a horizontal line.

Harris A. Pitlick

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